APR 21 1936

STATISTICAL BULLETIN

METROPOLITAN LIFE INSURANCE COMPANY

VOLUME 17 · MARCH · 1936 · NUMBER 3

Health Problems of the Floods

DISASTROUS floods overwhelmed 14 States in mid-March. They have left in their wake a health problem of the first order.

The death toll, so far, from drowning and exposure is approximately 200. But this is only a fraction of the number who may lose their lives in the aftermath, unless those in the districts affected cooperate fully in the measures taken by the Federal, State and city health authorities and the AMERICAN RED CROSS to prevent the spread of epidemic diseases—more especially typhoid fever, intestinal disorders, and pneumonia. Many thousands of people have endured serious hardships. The inevitable outcome is impaired vitality and lowered resistance to disease, at the very time when the disturbed conditions in the environment expose young and old to unusual health hazards.

Fortunately, our public health agencies are equal to the occasion. They are everywhere mobilizing against the possible consequences of the floods. Every known precaution is being taken to guard food and water supplies from contamination; and, so far as one can see, in those areas where the flood has already subsided, health conditions are rapidly being brought back to normal.

It is still too early, however, to say that the health emergency has passed. We cannot yet be sure that all possibilities of polluted water supplies have been eliminated. Accumulation of debris left by the flood, and the formation of stagnant pools where flies and mosquitoes may breed freely, are health menaces which are difficult wholly to remove. Steps which appear to be adequate are being taken to safeguard against these hazards. Health organizations, public and private, have sufficient skill and resources to handle this situation adequately. The great desideratum is the complete cooperation of the public itself. It is sincerely to be hoped that those who are affected will avail themselves freely of every assistance offered by the authorities, be it by inoculation against typhoid fever, by vaccination against smallpox, or simply by heeding advice regarding the necessity of boiling water supplies, of protecting foods against pollution, and of scrupulous attention to the general sanitation of homes and premises. It takes a catastrophe like the recent floods to awaken the public to a realization

of its great indebtedness to and dependence on the public health agencies, whose services, in normal times, we are only too apt to take for granted.

We have had an exceptionally hard winter. Yet, in spite of this, the health records up to the end of March have been excellent. Even now, despite the disastrous floods which have taken place in 14 of our States, it is still possible, if all in the stricken districts will work together toward the common objective, to make 1936 an extremely good health year.

The Health Advantages of the United States

WE DO not ordinarily appreciate what it means to live in a country so well protected against the ravages of disease as is ours. We are so accustomed to our immunity from the pestilences that still afflict many other countries that we have come to accept it as a matter of course. We can perhaps best appreciate the extent of our blessings by comparing them with the trials experienced by certain other countries where diseases which we have long since learned to control are still the causes of much misery, suffering, and death.

Cholera and plague are diseases which have only historical or medical interest so far as we in the United States are concerned. Yet in the British Provinces of India these diseases are still major causes of death. In the single year 1931 British India recorded more than 220,000 deaths from cholera and nearly 46,000 deaths from bubonic plague.

In that part of the United States where the people have learned the efficacy of vaccination as a preventive of smallpox, namely the 16 states bordering the Atlantic Ocean, there was only one death from this disease during the year 1933. In British India, on the other hand, in a population only five times as great, there were 103,641 smallpox deaths that year. There is a vast difference between living in the United States and in India.

Typhoid fever has been practically eliminated from most American cities. In New York and Chicago the present annual typhoid fever mortality rarely exceeds one in each 100,000 of population. In Nagasaki, Japan, however, the typhoid fever death rate reached 225 per 100,000 inhabitants in 1931. During 1933 La Paz, Bolivia, reported a typhoid mortality rate of 192 per 100,000 population, and Asuncion, Paraguay, a rate of 187. Delhi, India, registers rates well in excess of 100 per 100,000 year after year. Life is far from pleasant where such hazards still prevail.

Comparatively few of our leading cities nowadays record death rates from measles, scarlet fever, whooping cough, or diphtheria in excess of four per 100,000 — which may be contrasted with the death rates from measles of 315 per 100,000 in Bogota, Colombia, 200 in Quito, Ecuador,

and 175 in Karachi, India; with whooping cough death rates of 497 and 159 respectively in La Paz, Bolivia, and San Salvadore, Salvador; with scarlet fever rates of 59 and 39 in the Roumanian cities of Jassy and Bucharest; and with diphtheria death rates of 42 per 100,000 in Kingston-upon-Hull, England, and 45 in Ghent, Belgium.

Most of us recall the consternation caused in this country by the terrible influenza pandemic of 1918. In that year the death toll from influenza in the City of New York reached 229 per 100,000, a truly calamitous figure. Yet in Fortaleza, Brazil, approximately the same high death rate from influenza is experienced year after year. The average influenza mortality in Fortaleza during 1929–1931 was 216 per 100,000, with a peak of 260 in 1931.

No single disease, aside from the chronic diseases of old age, causes quite as many deaths in this country as does pneumonia. During recent years the pneumonia death rate in New York City has averaged about 100 per 100,000. However, this high rate fades into insignificance when compared with the pneumonia mortality registered in many foreign cities. In Madras, India, for example, the pneumonia deaths number approximately 700 per 100,000 each year. In Valparaiso, Chile, and in Manila, P. I., the pneumonia death rate averages about 500 per 100,000 annually. There are many other cities in foreign countries in which the pneumonia mortality varies between 300 and 500 per 100,000 year after year.

America takes pride in its tuberculosis record. In the last 35 years, tuberculosis mortality in this country has been reduced to about 55 per 100,000, or one quarter of the rate which prevailed in 1900. In view of this fact many will be astonished to learn that in Manila proportionately 10 times this number succumb to tuberculosis (550 per 100,000) annually. Other cities which annually report tuberculosis death rates so high as to be almost incredible are Guayaquil, Ecuador, 647; Callao, Peru, 573; Lisbon, Portugal, 487, and Athens, Greece, 414.

Despite the fact that the death rate from malaria has been increasing in the United States during recent years, it is still less than four per 100,000. Health workers in this country properly consider the death rates which prevail in certain counties of the Southern states—between 50 and 100 per 100,000 population—as most deplorable, but in comparison with the cities of Manaos and Belem in Brazil the malarious counties of the lower Mississippi Valley are veritable health resorts. During the period 1930–1933 these Brazilian cities reported malaria death rates of 517 and 407 per 100,000 inhabitants respectively. In Saigon-Cholon, French Indo-China, the mortality from this disease averaged 305 per 100,000 during 1932–1933, and in San Salvadore, Salvador, malaria death rates exceeding 225 per 100,000 are a common occurrence. It is almost inconceivable to us that such

communities can continue to exist amid such conditions.

It may be objected that the horrible conditions just cited exist only in cities of backward civilizations and are therefore hardly fit for comparison with the modern cities of America, but it should be recalled that it was not so very long ago that very similar conditions prevailed in many of our leading cities.

Consider, for example, the City of New York just prior to the establishment of the Metropolitan Department of Health in 1866*. At that time the death rate from all causes ranged from 30 to 35 per 1,000 population, rates similar to those found today in such hapless cities as Saigon-Cholon, Madras, Guayaquil, Guatemala City, Hanoi, and San Salvadore.

During the earlier years of the 19th century yellow fever was a frequent visitor to this city. In 1805 it caused a death rate of 344 per 100,000, and as late as 1822 a rate of 120. Cholera again and again ravaged the city causing 3,513 deaths in 1832, bringing the death rate to 1,558 per 100,000. Even as late as 1854 this disease was responsible for 2,500 deaths which, with the present population, would be equal to 28,000 deaths. Although vaccination was introduced in New York City in 1801, smallpox continued to be an intermittent health factor as late as the 70's, when the number of deaths recorded would be equivalent to 8,000 per annum in the present population. There has not been a single death from cholera in the City of New York since 1893, and only one fatal case of smallpox since 1912. During 1935 New York City recorded only 65 deaths from diphtheria as against 4,894 in 1881, when the population was less than one third its present size.

The same picture could be drawn for Boston, Philadelphia, Baltimore, or any other large American city of that era. In a recent issue of the STATISTICAL BULLETIN a comparison was made between the health conditions of Boston now and 100 years ago. It was found that conditions differed only slightly from those just pictured in New York City. The tuberculosis death rate of Boston a century ago was around 345 per 100,000; that from "typhus fever" was 76; the general death rate was more than 21 per 1,000, and the expectation of life at birth was only 38 years compared with 55 at the present time.

This wonderful improvement in public health during the present century cannot be attributed either to changes in natural conditions or to the development of greater resistance to disease in the individual. Rather, credit must be given to the tireless and intelligent efforts of our medical and public health services. These very competent bodies of public servants, trained in the technique of disease eradication and health promotion, have just cause for pride in the remarkable achievements of the last 30 or 40 years. The value of

*See *Quarterly Bulletin* of the New York City Department of Health, Volume 1, Number 4, pp. 96-98. 1933.

their service to the country in the improvement of health and the prolongation of life with resultant increase of happiness and material prosperity is really beyond computation.

A Life Table for the Total United States, 1933

FOR the first time in the history of our country it has become possible to present a life table based on the actual mortality statistics for all of the 48 States of the Union, Texas, the last State to be admitted to the Death Registration Area, having qualified in 1933. This table shows for the total population (both sexes combined) an expectation of life at birth of 61.26 years. The corresponding figure for 1901, the year for which the first official life table for any considerable part of the United States was constructed, was only 49.24 years. During the period of 32 years from 1901 to 1933, which corresponds to just about the length of a generation, the longevity of the population has so improved that a child born in 1933 had an expectation of life 12 years greater than its parents had at birth. In fact, the expectation of life at birth in 1901 was less than the expectation of life at age 17 in 1933.

It is possible to make several other interesting comparisons between the life table for 1901, which reflects longevity in only 10 States of the Union, and this latest table for 1933, which is based on the total 48 States. Out of every 1,000 children born in 1901, almost 125 died before they had completed their first year of life; by 1933 this figure was reduced by more than half, to 53. In 1901 mortality was at a minimum at age 11, with a rate of 2.56 per 1,000; in 1933 the minimum, which was at age 10, was only 1.19 per 1,000; again a reduction by more than half.

We have still another way of picturing the changes in longevity that have taken place in this period of 32 years. According to mortality conditions prevailing in 1901, out of 1,000 children born one quarter would have died before age 25; the corresponding age in our new life table for 1933 is 52 years. This is indeed a striking contrast. It embodies the results of a third of a century of public health work against typhoid fever, diarrhea and enteritis, the communicable diseases of childhood, and tuberculosis, to mention only some of the outstanding causes of curtailment of life. If we follow this line of comparison further, we find that according to the life table of 1901, one half of the children born would have died by age 58, and three quarters by age 74; the life table for 1933 shows the corresponding ages to be 68 and 78 years respectively. These changes in so short a period reflect extraordinary accomplishments in preventive medicine and public health, with important social and economic consequences to the nation.

What else does this first life table for the entire United States tell us?

It is necessarily a composite picture. The population of 128,000,000 upon which it is based contains people of a great variety of national origins, who live under conditions ranging from those prevailing among the primitive Indians of the Southwest, to those in our highly industrialized and mechanized cosmopolitan centers. The climatic conditions under which this population lives vary between such extremes as the sub-zero weather in the winter of the Northern States, and the intense summer heat of the desert. No other civilized country can find within its limits a range of contrasts comparable to ours. These will, in a certain measure, be reflected in the varying expectations of life of the people in the several States.

This leads us to look outside our own boundaries and see what is the fate of these nationalities in their own home countries. For the leading civilized nations the differences are relatively slight. So, in 1933, English males had an expectation of life at birth of 58.7 years and German males 59.8 years, while for white males in the entire United States it was 60.86 years. The corresponding figures for females in England, Germany, and the United States are 62.6, 62.6, and 64.40 years, respectively. Italy, in 1930–1932, had expectations of life at birth of 53.8 years for males and 56.0 years for females. Of the European countries, only the life tables in Norway, Sweden, Denmark, and Holland, are as favorable as ours. On the other hand, we are still not as favorably situated as New Zealand, where the expectation of life at birth in 1931 was 65.04 years for males and 67.88 years for females. These values, in our judgment, are not far from the extreme values of longevity possible with our present knowledge of disease and the current practice of the medical arts.

It may be of some historical interest to recall, at this point, that the first American life table, known as Wigglesworth's Table, was constructed in 1789 from bills of mortality gathered from several towns in New Hampshire and Massachusetts. The total number of deaths on these bills was less than 5,000. In contrast to this, the life table for the entire United States in 1933 herewith presented is based on more than 1,300,000 deaths occurring in a population of about 128 millions. We may also contrast the expectation of life at birth of 61.26 years according to this table with a corresponding figure of 35.5 years according to the Wigglesworth Table. While this latter was constructed by a rather faulty technique, and great reliance cannot be placed upon its indications, the figure cited may be regarded as at any rate an approximate measure of the expectation of life at that period.

One hundred and fifty years is a relatively short period in the life of a nation—but in this time a veritable miracle has been worked in preserving and extending human life and sustaining it for productive work and for the enjoyment of a full and rounded existence.

Expectation of Life and Mortality Rate per 1,000 at Specified Ages for Total Persons and for White Persons by Sex, United States 1933

Age	Expectation of Life			Mortality Rate per 1,000		
	Total Persons	White Males	White Females	Total Persons	White Males	White Females
0	61.26	60.86	64.40	53.12	54.35	44.34
1	63.67	63.33	66.37	8.47	8.38	7.38
2	63.21	62.86	65.86	4.12	4.18	3.61
3	62.47	62.13	65.10	2.95	3.05	2.59
4	61.65	61.31	64.26	2.30	2.36	2.08
5	60.80	60.46	63.40	1.92	1.98	1.75
10	56.25	55.94	58.82	1.19	1.30	.97
15	51.61	51.32	54.11	1.79	1.76	1.33
20	47.16	46.83	49.54	2.87	2.59	2.18
25	42.88	42.46	45.12	3.55	3.09	2.80
30	38.64	38.12	40.76	4.09	3.61	3.20
35	34.45	33.83	36.42	5.04	4.61	3.87
40	30.34	29.65	32.14	6.27	6.11	4.72
45	26.34	25.62	27.93	8.44	8.63	6.29
50	22.52	21.80	23.86	11.65	12.14	8.79
55	18.89	18.20	19.98	15.93	17.12	12.57
60	15.50	14.88	16.34	23.77	25.89	19.50
65	12.46	11.93	13.05	34.48	37.55	29.48
70	9.75	9.32	10.13	52.53	57.25	46.95
75	7.49	7.16	7.69	77.96	83.59	72.95
80	5.59	5.32	5.70	116.64	123.01	112.68
85	4.13	3.88	4.20	173.18	184.54	169.57
90	3.09	2.84	3.11	243.15	260.06	237.18

Recent Publications of the Statistical Bureau

THE following list of recent publications of the Statistical Bureau of the Metropolitan Life Insurance Company will be sent to interested readers of the STATISTICAL BULLETIN upon their request:

Monographs in a 20-Year Mortality Review, Metropolitan Life Insurance Company, New York, 1935 and 1936.

1. *The Mortality from Cancer*, 1911–1930.
2. *The Mortality from Tuberculosis*, 1911–1930.
3. *The Mortality from External Causes*, 1911–1930.
4. *The Mortality from Cardiovascular-Renal Disease*, 1911–1930. (Available in May.)

Progress in Cancer Control, Metropolitan Life Insurance Company, New York, 1935.

The Population Problem and World Depression, Foreign Policy Association, New York, 1936.

The Selection of Risks with a History of Gastric or Duodenal Ulcer, Association of Life Insurance Medical Directors of America, New York, 1936.

Fighting Cancer, Scribners, New York, February 1936.

Incidence of Gastric Cancer, American Journal of Surgery, New York, February 1936.

Studies in Diabetes Mellitus: Etiology, American Journal of the Medical Sciences, Philadelphia, April-May, 1936. (Available in June.)

A New Low Tuberculosis Death Rate in Prospect for Nineteen Thirty-six

FROM year to year, announcement has been made in the STATISTICAL BULLETIN that the tuberculosis death rate had registered a new minimum. Health workers have long since learned to expect these annual reductions. Their interest, in fact, lies each year in the extent of the decline rather than in the mere announcement that another drop had taken place. It would, indeed, be startling news if the BULLETIN had to report a break in the long series of annual decreases in the mortality rate from tuberculosis.

Nevertheless, the death record for tuberculosis among 17,000,000 Metropolitan Industrial policyholders, for the winter of 1936, has been so favorable that it constitutes a news item of unusual interest. The cumulative mortality rate, up to the end of February (52.0 per 100,000) was actually 10.7 percent lower than the previous minimum for this part of the year, 58.2, in 1935. With such a decided drop, at a time of the year when the tuberculosis death rate always runs well above the average for the remaining months, it becomes possible, even though only one sixth of 1936 has elapsed, to say that another sizable decline will be registered for the completed year. Furthermore, if between the end of February and the end of December the same percentage of decline, as occurred last year, is again recorded, the tuberculosis death rate among insured American and Canadian wage-earners and their families will, for the first time in their history, fall below 50 deaths per 100,000 insured lives. This is a little more than one fifth the mortality rate among this same cross-section of the population 25 years ago; it is one half of the figure 10 years ago.

There is a strong probability, furthermore, that 1936 will also prove to be the first year in which the tuberculosis death rate in the general population of the United States will drop below 50 per 100,000. The rate was 56.6 in 1934, the latest year for which the official figure is available; and if the velocity of its fall in recent years is maintained through 1936, the figure for the current year should be between 49 and 50, which is substantially the same as that likely to be recorded for the insured wage-earning population.

The campaign against tuberculosis is rapidly reducing this disease to the status of a minor cause of death. The rate is declining in all parts of the country, among both white persons and Negroes, and in every age group. But, most significant of all is the fact that among the wage-earning population of our cities, where the situation was once the gravest, the greatest improvement is being recorded. Many workers in the public health field have felt for years that the time was bound to come when a decided retardation in the velocity of the falling tuberculosis death rate would be

experienced. When, as early as 1930, unfavorable business conditions began to prevail, with widespread unemployment among the industrial classes, it was feared that the general health status of the country would be affected and that one of the first adverse manifestations would be a check in the declining tuberculosis death rate. What we have actually experienced during the depression, however, has been an acceleration in the rate of the decline.

We continue to say, and with increasing assurance, that a death rate at or below 40 per 100,000 from tuberculosis (all forms) will be achieved by 1940.

Health Record for February 1936

MEAGER and scattered sources of information point to a somewhat higher death rate in the general population of the United States during the winter of 1936 than was recorded for the corresponding period of last year. The contrary is true, however, for an important cross-section of the population, namely the 17,000,000 people who are Industrial policyholders in the Metropolitan Life Insurance Company. In this group the year-to-date mortality rate declined, up to the end of February, from 9.4 per 1,000 in 1935 to 9.0 in 1936, which is an unusually low death rate.

The records of the Visiting Nurse Service of the Metropolitan Life Insurance Company give further evidence that better health conditions prevailed this winter than last among the insured wage-earning population. For, despite the rigorous winter through which we have just passed, there was an 11 percent decline in cases of illness nursed among the Company's Industrial policyholders, up to the end of February.

The cumulative mortality rates of the insured show large decreases for several important causes of death, specifically, 36.6 percent for influenza, 10.7 percent for tuberculosis, 6.6 percent for cancer, 10.9 percent for diabetes, 4.1 percent for heart disease, 7.7 percent for chronic nephritis, and 6.7 percent for accidents. In addition, there were noteworthy drops for a number of other less important causes of death. In fact, aside from considerable rises in the death rates recorded for diseases of the coronary arteries and diarrheal complaints, and a negligible increase in the mortality from typhoid fever, no disease listed in the table on page 11 shows a higher death rate for 1936 than was registered for the first two months of 1935.

The improvement in mortality so far this year, has not extended to the policyholders of the Pacific Coast and Mountain States. Their cumulative death rate (7.1 per 1,000), while reflecting an exceedingly favorable health picture, is, nevertheless, nearly 8 percent above that recorded for the corresponding period of 1935.

The death rate in the general population of the large cities of the United States in February was 14.0 per 1,000 estimated population, as compared with 13.4 in January 1936, and 12.8 in February 1935. The diseases which showed increased prevalence, as compared with January, were influenza, measles, and scarlet fever; fewer cases of sickness from diphtheria, poliomyelitis, smallpox, and typhoid fever were reported. Comparison with February a year ago shows more sickness from influenza, scarlet fever, and smallpox, with less from diphtheria, measles, poliomyelitis, and typhoid fever.

Reports from 31 states show approximately four times as many cases of influenza reported in February as in January. The usual seasonal increase in sickness from measles and scarlet fever has been observed in these States.

The following are some of the items of special public health interest recently reported. The Chicago Health Department has recently opened two evening clinics for women needing antepartum care. Plans have been made for taking roentgenograms of students in 22 Brooklyn high schools. The Medical Society of the County of Kings, The Brooklyn Tuberculosis and Health Association, and the New York City Departments of Education and Health are jointly engaged in this project. Announcement is made that at a sanatorium in California there is to be erected a special unit for Indians. The Federal Government has appropriated $60,000 for this project. The Reading, Pa., Tuberculosis Association is making special tuberculosis examinations of pupils in the schools who take part in strenuous athletics.

It has been announced that medical examinations would be given, through W.P.A. facilities, to more than 700,000 Pennsylvania school children. Under the auspices of the United States Public Health Service, more than 80,000 persons in Bronx, Brooklyn, and Queens Boroughs, New York City, have been visited in the nationwide health survey designed to obtain information on chronic disease and disabling illness. The annual report of the Commonwealth Fund announces appropriations of over $1,500,000 last year. More than two thirds of this sum was for the promotion of health and medical service, in large part through subsidy and technical advice for health departments and hospitals in rural districts and small communities.

The following table shows the mortality among Industrial policyholders for February 1936, January 1936, and February 1935, together with the cumulative rates for the first two months of each year.

METROPOLITAN LIFE INSURANCE COMPANY

Death Rates per 100,000 for Principal Causes. Weekly Premium-Paying Business in Industrial Department. All Ages (Annual Basis).*

MONTHS OF FEBRUARY 1936, JANUARY 1936, AND FEBRUARY 1935.

CAUSES OF DEATH	ANNUAL RATE PER 100,000 LIVES EXPOSED*				
	February 1936	January 1936	February 1935	Cumulative January-February	
				1936	1935
TOTAL—ALL CAUSES	931.3	876.2	924.7	901.8	939.6
Typhoid fever	.2	.6	.3	.4	.3
Measles	1.2	.8	2.5	1.0	1.9
Scarlet fever	3.1	2.3	3.8	2.7	3.4
Whooping cough	1.5	1.6	3.5	1.5	3.4
Diphtheria	2.1	3.1	2.7	2.6	2.9
Influenza	23.7	17.9	31.9	20.6	32.5
Tuberculosis (all forms)	55.9	48.6	54.8	52.0	58.2
Tuberculosis of respiratory system	48.9	43.6	50.3	46.1	53.6
Syphilis, locomotor ataxia, and general paralysis of the insane	11.4	11.6	11.1	11.5	11.5
Cancer (all forms)	90.5	83.2	92.0	86.6	92.7
Diabetes mellitus	26.0	24.8	27.9	25.4	28.5
Cerebral hemorrhage; apoplexy	69.6	63.6	70.3	66.4	68.0
Diseases of heart†	182.8	168.1	183.7	175.0	182.5
Diseases of the coronary arteries	28.9	23.7	22.5	26.1	23.2
Angina pectoris	11.4	8.0	13.3	9.6	12.1
Pneumonia (all forms)	104.8	104.8	94.9	104.8	105.4
Diarrhea and enteritis	5.7	6.6	4.2	6.2	5.2
Appendicitis	8.6	9.0	10.5	8.8	10.5
Chronic nephritis (Bright's disease)	64.3	60.3	68.1	62.2	67.4
Puerperal state—total	8.1	6.7	9.5	7.3	10.1
Suicides	6.9	8.4	8.0	7.7	7.9
Homicides	3.1	5.0	5.3	4.2	6.2
Accidents—total	45.1	54.1	51.3	49.9	53.5
Automobile accidents	11.7	19.2	16.2	15.7	18.9
All other diseases and conditions	176.1	163.6	153.1	169.4	152.5

*The rates for 1935 and 1936 are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.

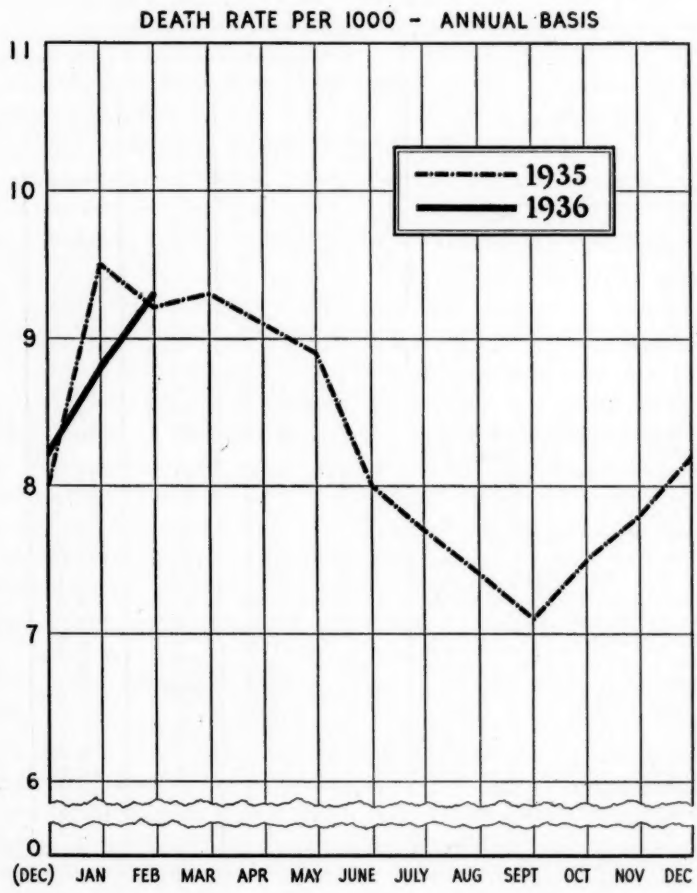
†Excludes pericarditis, acute endocarditis, and acute myocarditis.

Correspondence on the subjects discussed in these BULLETINS may be addressed to: The Editor,

STATISTICAL BULLETIN,
Metropolitan Life Insurance Company,
1 Madison Avenue, New York, N. Y.

DEATH RATES FROM ALL CAUSES

METROPOLITAN LIFE INSURANCE CO. – INDUSTRIAL DEP'T.
WEEKLY PREMIUM-PAYING BUSINESS – TOTAL PERSONS



1935	9.5	9.2	9.3	9.1	8.9	8.0	7.7	7.4	7.1	7.5	7.8	8.2
1936	8.8	9.3										

Rates are provisional

METROPOLITAN LIFE INSURANCE COMPANY PRESS
NEW YORK, U.S.A.
78496